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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,512	12/18/2001	G. Colby Conkwright	37865.010400	1081

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EXAMINER

CHAMPAGNE, DONALD

ART UNIT

PAPER NUMBER

3622

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/020,512	CONKWRIGHT ET AL.
	Examiner Donald L. Champagne	Art Unit 3622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 12 October 2004.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1 and 3-30 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1 and 3-30 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 18 December 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.  
 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.  
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.  
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

***Response to Arguments***

1. Applicant's arguments filed with an amendment on 12 October 2004 have been fully considered but they are not persuasive. The arguments are addressed at para. 4-8, 14 and 18 below.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 8 and 13-26 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the remaining claims, does not reasonably provide enablement for a user model derived using an inverse demographic matrix (IDM) method.
4. Applicant argues (p. 12-13) that "spec. para. 327" (para. [0240] of the published application, US20020133490A1) explains that "IDM is used to determine individual behaviors from a set of anonymous data gathered in a specific geographic area based on the demographic make up of that geographic area". That addresses the written description requirement: what IDM does. However, the rejection is based on the enablement requirement: how IDM allegedly does what the specification says it does.
5. "IDM" is explained to be an acronym for "inverse demographic matrix" solution at spec. para. [0130], and it is related to "a least squares approach", matrix inversion and Fig. 10. Neither this nor any other part of the specification provides the clear definition of IDM required by MPEP § 2111.01. Hence, the examiner is required to give the term "IDM" its broadest reasonable interpretation (MPEP § 2111), which the examiner judges to be a form of regression analysis.
6. it is not clear how "IDM is used to determine individual behaviors". As a least squares method, it is readily apparent how IDM could be used to predict individual behaviors within certain statistical limits well known to those of skill in the art, but that is not the same as being "used to determine individual behaviors" (emphasis added). One of ordinary skill in

the art would understand "determine" without qualification to have a deterministic connotation. The examiner is not aware how any method that relies on a least squares computation is able to "determine" anything, which is to say ascertain with certainty. If applicant meant that IDM is used to estimate individual behaviors within certain statistical limits, then applicant should have disclosed this in the specification. Applicant did not. As a result, the examiner fails to see how IDM is used to determine individual behaviors, and the examiner believes that one of ordinary skill in the art would also fail to understand how IDM is used to determine individual behaviors.

7. The specification contains a lot of detail, but these details are not enlightening by conventional mathematical standards. For example, at the end of para. [0129], "Equation 2" is identified as an error function. That is consistent with the conventional use of that term. However, para. [0130] states that "Equation 2 can be solved through a standard least-squares approach". That makes no conventional sense since there is nothing in Equation 2 to solve for.
8. The instant invention may truly be novel, and the law does not require that applicants use conventional meanings to explain their inventions. But the law does require that applicants disclose to those of ordinary skill in the art how their invention accomplishes its claimed purpose, and the law does require that applicants define and explain their language if it is not conventional. The applicant has not done either in the instant application.

#### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
10. Claims 1, 3-7, 9-12 and 27-30 are rejected under 35 U.S.C. 103(a) as obvious over Salgonicoff (US pat. 5,734,720) in view of Jenkins (US pat. 6,285,983).
11. Salgonicoff teaches (independent claim 1, 27 and 30) collecting data associated with at least one set top box (col.6 lines 41-43); deriving at least one *customer profile* (user model)

for each set top box based on the collected data (col. 6 lines 46-49); storing the user model for later retrieval (col. 6 lines 61-63 and col. 9 lines 33-37); selecting content and content attributes to be delivered to at least one set top box, delivering said content and attributes to the set top box, and causing the content to be presented by the set top box (*for receipt on the customer's television*) when a correlation (*comparison of customer profiles and content profiles or the agreement matrix determining step*) exists between the content attributes and the user model associated with the set top box (col. 4 lines 57-64, col. 3 lines 8-12 and col. 5 lines 3-6, 10-11 and 59-63).

12. Salgonicoff does not explicitly teach storing an identifier corresponding to the set top box from which the user model is derived. However, under the principles of inherency (MPEP § 2112.02), since the reference invention necessarily performs the method claimed, the method claimed is considered to be anticipated by the reference invention. As evidence tending to show inherency, it is noted that the reference does teach polling the set top boxes (col. 6 line 65), which would be impossible if an address/identifier for the box had not been stored.
13. Salgonicoff does not teach anonymously collecting data, and (claims 4 and 28) removing all personally identifiable information from said data before allowing said data to be used. Jenkins teaches (col. 3 lines 22-28) transmitting data to a privacy server, which removes all personally identifiable information from said data before allowing said data to be used, and reads on anonymously collecting data. Because Jenkins teaches that the invention overcomes privacy concerns (col. 2 lines 6-10), it would have been obvious to one of ordinary skill in the art, at the time of the invention, to add the teachings of Jenkins to those of Salgonicoff.
14. Applicant argues (p. 14 top) that Salgonicoff fails to teach or suggest anonymously collecting data. That is what para. 13 above says. Applicant also argues (p. 15, second para.) that Jenkins does not overcome the above-noted deficiency of Salganicoff, because Jenkins discloses creating marketing profiles and for directing customized offers to consumers while preserving consumer privacy. That fails to address the reasoning given in para. 13 above, which is unchanged from the last Office action.
15. Salgonicoff also teaches claim 3 (col. 6 lines 54-55); claim 5 (col. 24 lines 32-34); claims 6-7 (col. 4 lines 49-51); claim 10 (col. 25 lines 3-7); and claim 11 (col. 6 lines 15-39).

16. Salgonicoff also teaches: (claims 9 and 10) that content is changed based on feedback from the customer, including when a program is not selected by the customer (col. 6 lines 41-43 and col. 7 lines 10-12), which reads on repeating the content until the user has experienced said content, and said content must be experienced before user selected content can be experienced.
17. Claims 8, 13-15 and 19-22 are rejected under 35 U.S.C. 103(a) as obvious over Salgonicoff in view of Gerace (US pat. 5,848,396). Salgonicoff does not teach that the user model is derived using an inverse demographic matrix (IDM) method. Gerace teaches (col. 2 lines 43-48) a user model derived using “regression analysis”, which reads on an inverse demographic matrix (IDM) method. Because regression analysis/IDM is commonly known to be a very efficient means for summarizing data, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to add the teachings of Gerace to those of Salgonicoff.
18. Applicant argues (p. 15, bottom para.) that the regression analysis of Gerace is not the instant invention’s inverse demographic matrix method. As noted above (para. 5), applicant discloses that IDM is a least squares method which uses matrix inversion. One of ordinary skill in the art would recognize those to be key characteristics of a regression modeling method, and applicant has disclosed nothing to distinguish the IDM method from other regression modeling methods, including that of Gerace.
19. Claims 16-18 and 23-26 are rejected under 35 U.S.C. 103(a) as obvious over Salgonicoff in view of Jenkins and further in view of Gerace, for the reasons given above. Independent claim 16 is essentially a combination of claims 4 and 8, and independent claim 23 is essentially a combination of claims 4, 8 and 9.

### *Conclusion*

20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
21. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of

the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L Champagne whose telephone number is 571-272-6717. The examiner can normally be reached from 6:30 AM to 5 PM ET, Monday to Thursday. The examiner can also be contacted by e-mail at [donald.champagne@uspto.gov](mailto:donald.champagne@uspto.gov), and *informal* fax communications (i.e., communications not to be made of record) may be sent directly to the examiner at 571-273-6717.
23. The examiner's supervisor, Eric Stamber, can be reached on 703-305-8469. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).
25. **AFTER FINAL PRACTICE** – Consistent with MPEP § 706.07(f) and 713.09, prosecution generally ends with the final rejection. Examiner will grant an interview after final only when applicant presents compelling evidence that "disposal or clarification for appeal may be accomplished with only nominal further consideration" (MPEP § 713.09). The burden is on applicant to demonstrate this requirement, preferably in no more than 25 words. Amendments are entered after final only when the amendments will clearly simplify issues, or put the case into condition for allowance, clearly and without additional search or more than nominal consideration.

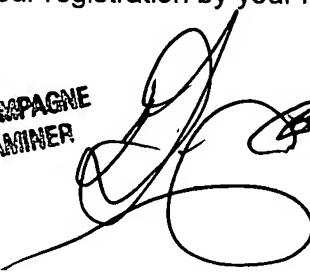
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26. Applicant may have after final arguments considered and amendments entered by filing an RCE.

27. **ABANDONMENT** – If examiner cannot by telephone verify applicant's intent to continue prosecution, the application is subject to abandonment six months after mailing of the last Office action. The agent, attorney or applicant point of contact is responsible for assuring that the Office has their telephone number. Agents and attorneys may verify their registration information including telephone number at the Office's web site, [www.uspto.gov](http://www.uspto.gov). At the top of the home page, click on Site Index. Then click on Agent & Attorney Roster in the alphabetic list, and search for your registration by your name or number.

15 January 2005

DONALD L. CHAMPAGNE  
PRIMARY EXAMINER



Donald L. Champagne  
Primary Examiner  
Art Unit 3622